



# Mammals of Stillwater



Stillwater Wildlife Management Area is in west-central Nevada, about 25 miles northwest of Fallon, in Churchill County. The elevation is about 4,000 feet above sea level. While management centers around waterfowl, numerous mammals can be found in the wide variety of habitat. The eastern boundary of the Management Area extends to the foothills of the Stillwater Mountains. Stillwater Marsh comprises the eastern half of the Management Area, while the remaining portions are greasewood-shadscale desert, barren sand dunes and river bottoms.

The following list contains 46 species which may be found on Stillwater Wildlife Management Area. Historic records show that desert bighorn sheep (Ovis canadensis oni) also existed in the Stillwater Mountains. J. R. Alcorn, Division of Wildlife Services, greatly assisted with the compilation of the list of species and their abundance. The order in which species are listed, as well as scientific and common names follow Burt and Grossenheider's A Field Guide To The Mammals, 1964. Mammals are listed under family headings. Hall's Mammals of Nevada, 1946, was also consulted as a reference.

A key to mammalian families based on Hall's Mammals of Nevada is included. After the family is identified, the species can be separated from the list within the family grouping.

## PLAINNOSE BATS: VESPERTILIONIDAE

Bats are the only mammals that can truly fly. They seek refuge in caves in the Stillwater Mountains or in holes in trees during daylight hours, and fly about at dusk in search of insects. Bats have evolved a type of sonar system which enables them to fly in total darkness. Some bats migrate to warmer climates in winter while others stay and hibernate in caves.

YUMA MYOTIS (Myotis yumanensis) - common in foothills, occasionally around trees.

CALIFORNIA MYOTIS (Myotis californicus) - common in foothills, occasionally around trees.

SMALL-FOOTED MYOTIS (Myotis subulatus) - common in foothills, occasionally around trees.

SILVER-HAIRED BAT (Lasiurus noveboracensis) - occasionally found along Carson River, generally during fall migration around trees.

WESTERN PIPISTREL (Pipistrellus hesperus) - most common of the bats, found widely over the Area.

WESTERN BIG-EARED BAT (Plecotus townsendi) - found in foothills during summer.

PALLID BAT (Antrozous pallidus) - found in foothills during summer.

MEXICAN FREETAIL BAT (Tadarida brasiliensis) - found in foothills during summer.

#### RINGTAIL CATS, RACCOONS: PROCYONIDAE

RACCOON (Procyon lotor) - can be a major predator on waterfowl nests, occasionally seen in Stillwater Marsh and along Carson River.

#### MINKS, WEASELS, BADGERS, SKUNKS: MUSTELIDAE

Members of this family usually have long, slender bodies and short legs. Most have anal scent glands. They are flesh-eaters and efficient hunters.

LONGTAIL WEASEL (Mustela frenata) - occasionally seen in Stillwater Marsh and may occur along the Carson River.

MINK (Mustela vison) - may possibly occur in Stillwater Marsh and along Carson River. Several were trapped in Stillwater Marsh in the 1950's.

BADGER (Taxidea taxus) - occasional individuals are seen in the sandy areas of Indian Lakes.

SPOTTED SKUNK (Spilogale putorius) - None have been recorded on the Management Area, but they are found on nearby farmland so they may occur.

STRIPED SKUNK (Mephitis mephitis) - abundant on nearby farmland, and may occasionally occur on the Management Area.

#### COYOTES, WOLVES AND FOXES: CANIDAE

COYOTE (Canis latrans) - found on all the Management Area, common during the entire year, but most abundant during fall months.

KIT FOX (Vulpes macrotis) - primarily nocturnal, this animal is rarely seen in daylight. It is occasionally seen in the sandy areas of Indian Lakes.

SMALL KANGAROO RAT (Dipodomys ordi) - Medium-sized, 5 toes on hind feet, awl-shaped upper incisors, common in Indian Lakes.

GREAT BASIN KANGAROO RAT (Dipodomys microps) - Medium to large sized, 5 toes on hind feet, chisel-shaped lower incisors, common in Indian Lakes.

DESERT KANGAROO RAT (Dipodomys deserti) - Largest of the kangaroo rats, 4 toes on hind feet, common in Indian Lakes around deep, drifted sand.

MERRIAM KANGAROO RAT (Dipodomys merriami) - Small to medium sized, 4 toes on hind feet, abundant at Indian Lakes, habitat extends from vegetated sandy areas toward barren alkali flats.

#### BEAVER: CASTORIDAE

BEAVER (Castor canadensis) - Largest of North American living rodents. Noted for their ability to gnaw down trees and also build dams across streams. Beaver ponds provide habitat for a wide variety of other wildlife. Their houses are lodges of sticks and mud or else bank burrows. Once common in the Carson River, now a straggler may rarely occur there.

#### MICE, RATS, AND VOLES: CRICETIDAE

WESTERN HARVEST MOUSE (Reithrodontomys megalotis) - A characteristic to distinguish from Peromyscus is the grooved upper incisors, while Peromyscus has smooth upper incisors. Abundant in grassy areas around water, often found in marsh wren nests, occasionally found in sandy areas.

CANYON MOUSE (Peromyscus crinitus) - found in stony areas among rocks, common in foothills of Stillwater Mountains. White feet and tuft of hair on end of tail.

DEER MOUSE (Peromyscus maniculatus) - White feet, tail is distinctly bicolored, dark above and white below. Occurs occasionally over most of Area but most common around groves of trees.

PINON MOUSE (Peromyscus truei) - Large-eared mouse, tail bicolored. May possibly occur in cottonwood trees along Carson River.

NORTHERN GRASSHOPPER MOUSE (Onychomys leucogaster) - Stout body with short, white-tipped tail. Food consists principally of insects. Widespread over sandy areas.

DESERT WOODRAT (Neotoma lepida) - Rare around buildings and timbered areas. Hairy and not scaly tail.

BUSHYTAIL WOODRAT (Neotoma cinerea) - Distinguished by long, bushy, squirrel-like tail. May possibly occur in timbered areas along Carson River.

MOUNTAIN VOLE (MONTANE MEADOW MOUSE) (Microtus montanus) - Abundant in marsh and other grassy areas. Presence indicated by narrow runways through matted grass.

## CATS: FELIDAE

MOUNTAIN LION (Felis concolor) - This animal lives in the Stillwater Mountains, and therefore, could possibly occur in the foothills along the east side of the Management Area.

BOBCAT (Lynx rufus) - occurs in foothills, and occasionally moves out into the valley.

## SQUIRRELS: SCIURIDAE

Ground squirrels in this family have the habit of sitting up "picket pin" fashion which enables them to look over low vegetation for possible danger. They have internal cheek pouches to collect seeds which they store for food.

TOWNSEND GROUND SQUIRREL (Citellus townsendi) - Commonly called the Paiute ground squirrel because they were a major food item to Paiute Indians before white man's appearance. These squirrels aestivate about eight months of the year--from July to February. Numbers were greatly reduced on agricultural land because of the damage to crops. They are colonial by nature and may occasionally be found on the Management Area.

WHITETAIL ANTELOPE SQUIRREL (Ammospermophilus leucurus) - These squirrels are common on the brushy desert land. They run with their tail curled over the back showing the white underside and often climb shrubs. Different from Townsend ground squirrels who aestivate, antelope squirrels are active throughout the year. They also are generally solitary rather than colonial.

## POCKET GOPHERS: GEOMYIDAE

VALLEY POCKET GOPHER (Thomomys bottae) - Found around pastures and shoreline of Indian Lakes. Solitary for much of their lives, they are burrowers, seldom seen above ground. They have external fur-lined cheek pouches. Incisor teeth are always exposed when mouth is closed. Gophers feed largely on roots and tubers which they pull through the soil into their burrows.

## POCKET MICE, KANGAROO MICE, KANGAROO RATS: HETEROMYIDAE

Members of this family have strong hind feet and legs. They have fur-lined cheek pouches for gathering food. All are well adapted to arid conditions for they do not need drinking water and are nocturnal.

LITTLE POCKET MOUSE (Perognathus longimembris) - Common in sandy areas.

LONGTAIL POCKET MOUSE (Perognathus formosus) - Can be found in the foothills of Stillwater Mountains.

PALE KANGAROO MOUSE (Microdipodops pallidus) - Common in sandy areas, restricted to fine, loose, wind-blown sand. Great enlargement of auditory bullae portion of skull.

KEY TO MAMMALIAN FAMILIES

Tooth rows continuous, without true diastemae; canine teeth present above and below.

B. Toes lacking claws; toes support membrane for flight. PLAINNOSE BATS: VESPERTILIONIDAE

BB. Toes have claws; toes do not support a membrane or other adaption for flight.

C. Hind foot with five toes;

D. Tail with conspicuous rings; forty teeth; two molars in each upper jaw. RACCOON: PROCYONIDAE

DD. Tail without rings; less than forty teeth; one molar in each upper jaw. MINK, WEASEL, BADGER, SKUNK: MUSTELIDAE

CC. Hind foot with four toes;

D. Muzzle long and narrow, claws not retractile. COYOTE, FOX: CANIDAE

DD. Muzzle short and broad, claws retractile. CATS: FELIDAE

AA. Tooth rows with diastemae; canine teeth absent below and sometimes above.

B. No incisor teeth above; feet have hooves. DEER: CERVIDAE

BB. One or two incisor teeth on each side above; feet have claws.

C. Two incisor teeth on each side above (minute tooth behind large incisor). HARES AND RABBITS: LEPORIDAE

CC. One incisor tooth on each side above

D. Body and tail with quills. PORCUPINE: ERETHIZONTIDAE

DD. Body and tail without quills

E. Hair on middle of tail longer than diameter of fleshy part of tail; tail always longer than hind foot; always more than 3 cheek teeth.

F. Body form adapted to aquatic life. NUTRIA: CAPROMYIDAE

FF. Body form not adapted to aquatic life. SQUIRRELS: SCIURIDAE

EE. Hair on middle of tail shorter than diameter of fleshy part of tail (except Aplodontia where tail is shorter than hind foot and except Neotoma cinerea has only 3 cheek teeth.

F. External fur-lined cheek pouches

G. Tail more than  $\frac{3}{4}$  length of head and body; claws on forefeet less than  $1\frac{3}{4}$  as long as those on hind feet. POCKET MICE, KANGAROO RATS: HETEROMYIDAE

GG. Tail less than  $\frac{3}{4}$  length of head and body; claws on forefeet more than  $1\frac{3}{4}$  as long as those on hind feet. POCKET GOPHERS: GEOMYIDAE

FF. No cheek pouches

G. Tail flattened dorsoventally. BEAVER: CASTORIDAE

GG. Tail not flattened

H. Annulations on tail nearly or completely concealed by hair; cheek teeth with cusps in two longitudinal rows. MICE, RATS, VOLES: CRICETIDAE.

HH. Annulations on tail revealed by sparse hairiness; cheek teeth with cusps in three longitudinal rows. OLD WORLD MICE: MURIDAE

TAIL VOLE (LONG-TAILED MEADOW MOUSE) (Microtus longicaudus) - May possibly occur along the foothills. Does not make numerous well defined runways, and occurs farther from water than M. montanus.

SAGEBRUSH VOLE (Lagurus curtatus) - May possibly occur along foothills in sagebrush areas.

MUSKRAT (Ondatra zibethica) - Aquatic rodent easily identified by its laterally-compressed tail which is sparsely haired. House consists of mound of aquatic vegetation, usually cattail or bulrush or sometimes pondweed. Many muskrats do not build houses but live in bank burrows. Abundant in marsh and uncommon in Indian Lakes.

#### OLD WORLD RATS AND MICE: MURIDAE

HOUSE MOUSE (Mus musculus) - Common around buildings.

#### PORCUPINE: ERETHIZONTIDAE

PORCUPINE (Erethizon dorsatum) - Only North America mammal with long sharp quills. Rare over entire Management Area.

#### NUTRIA: CAPROMYIDAE

NUTRIA (Myocastor coypus) - Large South American aquatic rodent introduced into Louisiana. Spread over much of the United States. Similar to muskrat but larger and has round tail. May possibly occur in marsh. Several individuals were trapped in early 1950's.

#### HARES AND RABBITS: LEPORIDAE

BLACKTAIL JACKRABBIT (Lepus californicus) - A hare characterized by large size, long ears and hind feet, young born with fur and eyes open. Habit of living in open, relying on running ability to escape enemies. Common in desert area, uncommon in marsh.

MOUNTAIN COTTONTAIL (Sylvilagus nuttalli) - A rabbit characterized by smaller size, shorter ears and hind feet than hares, young born short-haired or naked and blind. Habit of living close to dense cover into which it escapes enemies.

#### DEER: CERVIDAE

MULE DEER (Odocoileus hemionus) - A small number commonly occur along the Carson River, rarely seen on the rest of the Management Area.

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